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(Susan Lanney)

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Docket No. ENGE-P01-002
(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Schwartz et al.

Confirmation No.: 6161

Application No.: 10/032,827

Art Unit: 1636

Filed: October 23, 2001

Examiner: T. A. McKelvey

For: ENGINEERED STIMULUS-RESPONSIVE

**SWITCHES** 

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## RESPONSE TO RESTRICTION REQUIREMENT

Dear Sir:

This response is filed in reply to the outstanding Restriction Requirement, mailed July 1, 2004, as part of the Petition to Revive Unintentionally Abandoned Application, in connection with the above application. Applicants hereby elect Group I, Claims 1-3, 12-20, 25-33, and 36-54, with traverse, on the following grounds.

Applicants traverse this restriction requirement on the basis that all Groups are so closely related, and they share common features that would facilitate searching all groups at once. In addition, for many Groups, there are only one or a few claims in those Groups. In many cases, individual claims have even been divided into two Groups (see Claims 34, 35, 79, and 81-97). Thus simultaneous search of all Groups, even when they are distinct or unrelated, would not impose undue search burden on the Examiner. Accordingly, reconsideration and withdrawal of the Restriction Requirement are respectfully requested.

Regarding the <u>target biomolecule</u> species election (1), Applicants hereby provisionally elect, *for search purpose only*, Species "transmembrane protein" of Group I, *with traverse*. Presently, Group I Claims 1-3, and 14-17 read on the elected species.

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Regarding the <u>interaction domain</u> species election (2), Applicants hereby provisionally elect, for search purpose only, Species "helix-turn-helix motif" of Group I, with traverse. Presently, Group I Claims 1-3, 12-20, 25-29, 32, and 33 read on the elected species.

Regarding the <u>effect detectable outside of sensor cell</u> species election (3), Applicants hereby provisionally elect, *for search purpose only*, Species "expression of the reporter gene modulates transcription of an additional gene, said additional gene causing the effect detectable outside the sensor cell" of Group I, *with traverse*. Presently, Group I Claims 36, 40, and 41 read on the elected species.

Regarding the <u>stimulus</u> species election (4), Applicants hereby provisionally elect, for search purpose only, Species "perturbation of a thermodynamic state" of Group I, with traverse. Presently, Group I Claims 42, 43, and 48-50 read on the elected species.

Regarding the <u>biological gate type</u> species election (5), Applicants hereby provisionally elect, *for search purpose only*, Species "AND gate" of Group I, *with traverse*. Presently, Group I Claims 45-50 read on the elected species.

Regarding the <u>change in response to expression of reporter gene</u> species election (6), Applicants hereby provisionally elect, *for search purpose only*, Species "the location of said downstream cell changes in response to expression of said reporter gene" of Group I, *with traverse*. Presently, Group I Claims 51 and 52 read on the elected species.

Regarding species elections (7) - (10), since only non-Group I claims are involved, Applicants will make such species election for search purpose should the Examiner rejoin the other Groups with the currently elected Group I.

Applicants elect these species with traverse, because the subject matter of the relevant species are related in structure, function and/or sequence, and in almost all cases, the number of species to be elected from are sufficiently few that simultaneous search of all species would not constitute a significant additional burden to the Examiner.

"If the search and examination of an entire application can be made without serious burden, the examiner <u>must</u> examine it on the merits, <u>even though it includes claims to independent or distinct inventions</u>." (emphasis added, MPEP § 803).

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In addition, Applicants note that there are generic claims linking elected and non-elected species for each species election (for example, claims 1-3 are generic claims linking elected and non-elected species (1)). Claims directed to elected and non-elected species are dependent claims of the generic claims, and include all limitations of such generic claims. Pursuant to MPEP 809.04, "[i]f a linking claim is allowed, the examiner must thereafter examine species if the linking claim is generic thereto, or he or she must examine the claims to the non-elected inventions that are linked to the elected invention by such allowed linking claim." Thus, restrictions imposed on species encompassed by generic claims must be withdrawn upon indication of an allowable generic claim (MPEP § 809). In other words, upon the allowance of a generic claim, Applicants are entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR § 1.141 (MPEP § 809.02(a)).

Furthermore, the burden is on the Examiner to examine these generic claims throughout their scope, together with any claims dependent thereon drawn to non-elected species or inventions, rather than for Applicants to limit the scope of the generic claims to conform to the scope of any species or inventions listed in a Restriction Requirement.

As to species election (5) (biological gate type), Applicants submit that species subjected to election are encompassed by a Markush group. Pursuant to MPEP § 803.02, "If the members of the Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the examiner must examine all claims on the merits, even though they are directed to independent and distinct inventions." Applicants submit that such is the case in this species election. Particularly, since there are only 4 member species within the Markush group, all of them can be examined simultaneously without significant additional burden on the Examiner. In addition, Applicants respectfully point out that the search of the Markush-type claim will be extended to non-elected species should no prior art be found that anticipates or renders obvious the elected species (MPEP § 803.02).

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The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an extension of time be required, Applicants hereby petition therefor and request that the extension fee and any other fee required for timely consideration of this

submission be charged to Deposit Account No. 18-1945.

Dated: June 3, 2005

Respectfully submitted,

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